

RESONANT TREE DRIVEN CLOCK DISTRIBUTION GRID

ABSTRACT OF THE INVENTION

5 An integrated circuit (IC), IC assembly and circuit for distributing a clock signal
in an integrated circuit includes a capacitive clock distribution circuit having at least one
conductor therein. At least one inductor is formed in a metal layer of the integrated circuit
and is coupled to the clock distribution circuit. The inductor, generally in the form of a
number of spiral inductors distributed throughout the integrated circuit, provides an
10 inductance value selected to resonate with the capacitive clock distribution circuit at
resonance, power dissipation is reduced while skew and jitter performance can be
improved.